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| **Halifax County Schools Elementary School Lesson Plan** | | | | | | | | | |
| Subject: MATH | **Teacher:** | | | | **Grade Level: First Grade** | | **Date(s): September 26-30, 2016** | | |
| **Content :**  Common Core Standards & Essential Standards | **1.NBT.2** Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:  **a.** 10 can be thought of as a bundle of ten ones – called a “ten.” | | | | | **Can Statements /Learning Targets** (I can……..)   * I can know that a bundle of ten ones is called a ten. * I can identify how many tens are in a 2-digit number. | | | |
| Essential Question(s): (What question(s) should students be able to answer at the end of the lesson/unit?) | How can I represent the number ten?  Why is the number ten so important?  Why is a bundle of ten ones called a ten? | | | | | **Standard for Mathematical Practice:**  **1.Make sense and preserve in solving problems.**  **2. Reasons abstractly and quantitatively.**  **3. Constructs viable arguments and critiques the reasoning of others.**  **4. Models with mathematics.**  5. Use appropriate tools strategically.  6. Attend to precision.  7. Looks for and makes use of structure.  8. Looks for and expresses regularity in repeated reasoning. | | | |
| **Technology Connection:**  [www.softschools.com](http://www.softschools.com)  [www.tenmarks.com](http://www.tenmarks.com)  [www.smartfirstgraders.com/counting -actiities.hmtl](http://www.smartfirstgraders.com/counting%20-actiities.hmtl) | | | |
| **Vocabulary:**  Academic/Content | * Teen number- numbers made up of one ten and some ones; in this program, the numbers 11 through 19 are referred to as teen numbers * 10-stick- a vertical line through ten dots (ones) to represent one ten (gradually, students draw just the stick without the dots to represent one ten) * Dot Array a MathBoard feature, the Dot Array is two 10x10 arrangements of dots, the dots are 1cm apart * Ten stick * Dot array * Tens * Ones | | | | | **Literature Connection:**  A Fair Bear Share by Stuart J. Murphy and John Speirs  Earth Day –Hooray! By Stuart J. Murphy and Renee Andriani | | | |
| **Materials Needed:** | **Monday**   * Demonstration Secret Code Cards 1-10 and MathBoard materials (or 10x10 Grid)   Tuesday   * Activity - *“Extension Activity”* * Activity Card * MathBoard   Wednesday   * Activity: “*Packaging*   *Stories’*   * MathBoards or dot arrays * Dry erase markers and erasers   Thursday   * Activity Cards Activity “Tens and Ones” | | | | |  | | | |
| **Center Rotation Activities**  **(Teacher will model routines for center rotations. Full center rotations will begin in the third week of school.)** | **Math with Teacher**  Teacher/TA works with guided math group on skill(s) for the week. | **Math Fluency**  Teacher may choose math tasks based on students mathematical abilities and skills being taught. | | | | **Technology**  [**http://www.ixl.com/math/grade-1**](http://www.ixl.com/math/grade-1)  This is website allows students to play games based on math skills.  www.tenmarks.coom | | | **Writing About Math**  Teacher Choice |
| **Monday**  **Subject Integration:** | **Whole Group**  ***Exploring Teen Numbers***  **Activity 1:**   1. Write the numbers 10-19 on the board and have students count aloud as you point to each number. Discuss what students know about these numbers. Use the board to introduce tens-and-ones language. 2. Use the Demonstration Secret Code Cards to line cards 1-10 up on the ledge of the board, with the 10-card in the front. Demonstrate how Secret Code Cards can be used to make teen numbers (see suggested paragraph on Teacher Edition pp. 312). Present a teen-grouping story problem to the class and have students solve it in any way (see example on Teacher Edition pp. 313). Use the Demonstration Secret Code Cards to show the number that is the answer to the story problem. (Be sure to point out the smaller number in the top hand corner of the 10 and 6 cards.)   **Activity 2**:   1. Explain to the students that they'll be making some teen numbers on the 10x10 Grid. Have them begin by drawing 10 circles in the first column on the grid and explain that every teen number has a ten, so you will always need this group of ten. Have students draw 5 more circles in the second column. 2. Ask how many circles are on the grid and how do you show that number with the Demonstration Secret Code Cards. Lastly, ask the students to write the equation 10 + 5= 15 on their MathBoards or paper. Have the class name other teen numbers between 10 and 20. First have the class show the number by drawing circles on the grid, then show it with the Demonstration Secret Code Cards and have the student write the equation. 3. Use the Math Talk on Teacher Edition pp. 314 to summarize what they've learned about teen numbers.   **Additional Teacher Notes:**   * Materials for Going Further Activities include counters or beans, prepared bags with 11-19 beans or small objects, MathBoard * Home or School Activity: Children will describe a group of 12 as a dozen. Children will investigate objects are found in groups of 12, or dozens and draw a picture of them. | | | **Independent Work** | | | | **Assessment (formative/summative)**   * As students represent other teen numbers, observe whether they are able to show them in multiple ways: for example, by drawing circles on a grid to show a group of ten and some extra ones; or by writing an equation with the number 10. | |
| **Tuesday**  **Subject Integration:** | **Whole Group**  ***Representing Teen Numbers***  **Activity 1**   1. **Packaging Stories-** Have students find the Dot Array on their MathBoard or give them photocopies of TRB M47 and have them ring 14 dots, moving down the columns. Then have them draw a vertical line through the first column of dots to show that they have made a ten. Have the students write a ten-structure equation and check each student's work. 2. Ask students to make the number 17 with the dots, but this time they should draw a line through the first 10 dots and introduce the term, 10-stick for this representation (see prompts on Teacher Edition pp. 318). Use the Solve and Discuss Math Talk structure for the packaging stories on Teacher Edition pp. 319. For each problem, have them draw the numbers on the Dot Array and then write the equation.   **Activity 2**   1. **10-sticks and Circles-** On the board show the class how to quickly represent teen numbers such as 13 and 17, by drawing a stick for 10 and little circles for ones. Have the class count each drawing by tens and ones. Write a few teen numbers on the board as standard numerals and invite students to draw these numbers with 10-sticks and circles on the reverse side of their MathBoard or on paper.   **Extension**  Share the book Spunky Monkeys on Parade by Stuart J. Murphy. Have them count the flowers one by one to see that there are 14 flowers and then discuss that each can be counted by groups of two. Explain that counting object in groups makes counting easier and faster. Have students then complete the “Extension Activity”  **Additional Teacher Notes:**   * Materials for Going Further Activities: Spunky Monkeys on Parade by Stuart J. Murphy as a component of the extension, index cards, MathBoard or paper | | | **Independent Work** | | | | **Assessment (formative/summative)**   * Ask questions such as: How can you draw a 10-stick and circles to show the teen number 18?   What number do you show with a 10-stick and 4 circles? | |
| **Wednesday**  **Subject Integration:** | **Whole Group** Alignment Lesson ***Packaging Stories***  **Note: This lesson is a continuation Tuesday’s lesson.**  **Activity 1**: Review how to use the dot array on the MathBoard to show teen numbers. Present students with the following examples:  Draw tens and ones to show the number 17. Write the tens. Write the ones. Write how many.  \_\_\_ ten and \_\_\_\_ ones = \_\_\_\_  Draw tens and ones to show the number 12. Write the tens. Write the ones. Write how many.  \_\_\_ ten and \_\_\_\_ ones = \_\_\_\_  **Activity 2**: **This is a continuation of Tuesday’s lesson.**  Students will complete the packaging stories using the **Solve and Discuss strategy** introduced in Unit 2, Lesson 5. Have a few students complete their work on their MathBoard at the front of the room while the other children complete the activity at their seats. For each problem, children will represent the number on the dot array and then write the equation.  ***Differentiation:*** There are 2 different types of packaging stories:   1. Cynthia has a juice box with 10 ounces of juice and another 9 ounces of juice in a cup. How much juice does Cynthia have altogether? (Easier) 2. Jason has 17 markers. A marker box holds 10 markers. How many marker boxes can Jason fill? How many extra markers does Jason have? (Harder)   You may create more examples of the harder or easier stories depending on your students.  ***Assessment:*** For assessment use Activity, *“Packaging Stories Assessment”*. | | | **Independent Work** | | | | **Assessment (formative/summative)**  *“Packaging Stories Assessment”* | |
| **Thursday**  **Subject Integration:** | **Whole Group**  ***Understanding Tens and Ones***  **Activity 1**   1. Ask students to draw 4 sticks and 3 circles on a Dot Array. When they are finished, have them count the number of tens aloud. Teacher writes 40 + 3 on the board, and students write it somewhere on their MathBoard. 2. ***Build with Secret Code Cards:*** Teacher shows the class the number 43 using the Demonstration Secret Code Cards and class discusses what the cards tell about 43. Teacher demonstrates how to show 43, by placing the 3 card (from the ones cards) over the 0 in the 40 card. 3. ***Build and Count 2-Digit Numbers:*** Class draws 6 sticks and 5 circles, then count the tens. Teacher holds up hand to signal STOP and tells the class to "freeze". Then class counts the ones. Teacher turns the Demonstration Secret Code Card over to show the 10-sticks and ones on the back. Repeat several times (Teacher Guide, p. 339).   **Activity 2**   1. Students turn their MathBoard over and teacher directs class in counting by tens and ones while modeling the procedure on the board. Teacher suggests that children write an equation that shows the tens and ones and the total. 2. Volunteers are invited to say various combinations of tens and ones, while the class draws 10-sticks and circles, writes the equation, and says the number. 3. ***2-Digit Numbers to 10-Sticks and Circles:*** When students seem confident writing 2-digit numbers for 10-sticks and circles, teacher gives them 2-digit number in standard form. Students are asked to write the number down, and then show it by drawing 10-sticks and circles and then write the corresponding equation, sharing the total. Repeat with students selecting each number.   **Refer to Teacher Edition pages for additional support with Math Talk, Math Background English Language Learners, Math Expressions Lessons, Differentiated Instruction, etc** | | | **Independent Work** | | | | **Assessment (formative/summative)**  Ongoing Assessment: Observe whether students are able to write an equation and number when given a 10-stick and circle drawing. Also observe if students can make a drawing and write an equation when given a 2-digit number. | |
| **Friday**  **Subject Integration:** | **Whole Group**  Teacher will review skills and create an assessment covering skills taught during the week. | | | **Independent Work** | | | | **Assessment(formative/summative)**  **1.NBT.2a**  **1.NBT.2b**  Teacher will pull assessment materials from:  <http://commoncoretasks.ncdpi.wikispaces.net/home> | |
| **Reflection-Checking for Understanding**  Students who need enrichment:  Action/Activities**:** | | | **Reflection-Checking for Understanding**  Students who need enrichment:  Action/Activities**:** | | | | | **Reflection-Checking for Understanding**  Students who need enrichment:  Action/Activities**:** | |